

California

The following is the fruit of a few short
winter excursions in the immediate neigh-
borhood of San Francisco & Mare Island.
They were obtained during the winter of
1855 & 1856.

California.

As the expedition landed at California ~~only~~ in the winter, only the following few plants were collected, chiefly in the vicinity of the Naval Station, on Mare Island, at the upper end of the Bay of San Francisco.

Eschscholtzia ^{sch}*californica*, Cham.
Nat. Phys. Prod. p. 73, t. 15. — *Chryseis californica*, Hook. & Arn. Nat. Bot. Bucch. Nov. p. 319. — *C. crocea*, Torr. & Gray, Fl. U. S. p. 63.
— The smaller form, var. *minor*, Hook. & Arn. l.c. Mare Island.

Frankenia grandifolia, Cham. & Schlecht. in Linnæa, 1, p. 35; Hook. & Arn. l.c., p. 135. Along the shores of Mare Island

~~*Spergularia* *zythafag*, B. P. P. v. 19, var. *marina*.~~ *Armenia media*, Bremdal *media*, Linn.

Spergularia rupestris, Cambess. in St.
Hil. Fl. Noras. 2. p. 176, t. 100; Benth. Bot. Mag.
p. 171. — In all probability no more than
a variety of S. rubra, but a ^{rather} well marked
one. As remarked by Chamisso and
by Torrey and Gray, the plant with
winged and wingless seeds are found
in different ^{capsules} ~~parts~~ of the same individual,
or even in the same capsule.

Crocidium cicutarium, Linn. Mare
Island.

{ Nosackia scoparia, Nutt. in Torr. & Gray.
Fl. 1. p. 325; Benth. Pl. Shaler. p. 300. Alca-
tras. This appears too near to N. pincea.

Lupinus arboreus, Sims, Bot. Mag.
t. 682; Benth. Pl. Shaler. l. c. L. macrocar-
pus. Hook. & Arn. l. c. Alcatras.

Lupinus sericeus, Pursh; Cechsch.;
Agardh. syn. Lup. Mare Island, Flowers
purple or light purple.

Rosa californica, Cham. & Schlecht.
in Linnaea, 2. p. 35. Mare Island.
Frangula californica, Gray, Linn. M. 2. p. 178.
Rhamnus californicus, Schlecht. R. oleifolia, Hook. Mare Island.

Photinia arbifolia, Lindl. Bot. Reg.
t. 491; Torr. & Gray. Fl. U. S. p. 473. Mare
Island; in flower. Aleutras; in fruit.

Dauschneria californica, Presl,
Kal. Natur. 2. p. 28, t. 52. Mare Island.

Kibes malvacium, Smith, in Kew,
by d.; Torr. & Gray. Fl. N. Am. 1. p. 552.

Megarhiza californica, Torr.

Oryzgium petiolatum, Hook. & Arn.
Bot. Am. 1. p. 250. Mare Island.

Phoradendron tomentosum, Engelm.
in Gray. N. Amer. p. 59. Niscum tomen-
tosum. A. N. Prodr. 4. p. 670.

Astropappus ericoides, Hook. & Arn.
Bot. Beech. p. 146. *Diplopappus ericoides*,
Less., in Linnaea, b. p. 117. *Ericameria micro-*
phylla, Nutt. in Trans. Amer. Phil. Soc. 7, p. 318.
Aleutras; growing in dense bunches.

Grindelia hirsutula, Hook. & Arn.
Bot. Beech. p. 351; Torr. & Gray, Fl. 2, p. 247.
Mare Island; in salt marshes, and on the
hills. — The achenia are ^{much} compressed, anci-
petal, smooth, and somewhat striate

Baccharis consanguinea, Dc.
Prov. s. p. 408. Aleutras; forming small
and dense bunches.

Baccharis Douglasii, Dc. Prov. s. p.
400; Bent. Pl. Hunter. p. 316. Mare
Island; in springy places.

Helenium puberulum, Dc. Prov. s.
p. 667; Torr. & Gray, Fl. 2, p. 385. Salt marshes,
a form with larger heads and rays than
usual.

Hemizonia pungens, Torr. & Gray,
Fl. 2. p. 399. *Hartmannia pungens*,
Nord. & Arn. Bot. Buch., p. 357; Nord. &
Pl. p. ~~344~~ 334. Mare Island; on
the side of bare hills.

Hemizonia ~~canescens~~^{ruidis}, Benth. B.A.
Sulph. p. 30. Mare Island. - Very much
branched from a simple erect base. Rays
white above, purplish beneath. Disk chaffy
throughout, greenish-white.

Coinogyne carnosula, Less. in Lin-
naea, b. p. 521. Mare Island, common
in salt marshes.

Artemisia californica, Less. in
Linnaea, b. p. 523. *A. Fischeriana*, Besser
in Sc. Prov. b. p. 105. *A. abrotanoides* &
A. foliosa, Nutt. Mare Island.

Achillea millefolium, Linn. Mare
Island, in salt marshes.

Onopordum Sprangeli, Nord. & Arn.
Bot. Buch. p. 150. Mare Island.

Macrorhynchus Lessingii, ~~S. B. Peet.~~
~~for~~ Hook. & Arn. Bot. Nach. p. 361. Inxianum
aspagioides, Less. in Linnaea, b. p. 501. Mare
Island. — This is clearly Chamisso's
plant, according well with his description,
and it was gathered in the same district.
The thick root is decidedly perennial.
A few of the outer achenes are pubes-
cent.

Plantago maritima, Linn. Mare
Island; on steep banks near the bay.

Malice Limonium, Linn., var.
S. California, Noviss. in S. B. Peet. 12, p.
643. Mare Island, in salt meadows.—
This appears to be ~~more~~ ^{hardly distinguishable from the} a variety
of S. Limonium of the Old World, ~~with~~
and has more compactness in flower spike
than the Var. Caroliniana of the Atlantic
coast; the 2-3-flowered spikelets more
densely crowded in short and spreading spikes.
Specimens which I gathered on the western
border of Texas (P. ~~the~~ No. of the
distributed collection) manifestly connect
the eastern and the western forms.

Mimulus (Diplacus) glutinosus,
Wendt.; Jacq. Hort. Schant., 3, t. 364. *Diplacus glutinosus*, Nutt.; Benth. in DC.
Prod., 10, p. 368. *Alcatraz.* — The insufficiency of the character of *Diplacus*
founded on the placentaion has been
shown by Torrey and Gray.

Cordylanthus

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Cuscuta acuminata, Nutt.

Leaves opposite
2 forms

Atriplex Bonus-Henryi, Reichert, var. erosum, Moq. in D. C. Prodr. 13, p. 85. Mare Island, in salt marshes. — This is doubtless Moquin-Tandori's plant. But its appearance is so unlike *A. Bonus-Henryi* that it may well be suspected to be specifically different.

Atriplex California, Moq. in D. C. Prodr. 13, p. 98. Salt marshes of Mare Island. — Proeminent or trailing, and loosely branched, herbaceous; the leaves thickish, but not coriaceous; the larger掌状 ones ovate-lanceolate and an inch and a half long. Moquin must have described the species from branches or despatched specimens.

Arthocnemum fruticosum, Moq. i.e. var. Californicum. With the preceding.

Eriogonum nudum, Dcgl. in Benth. Eriog. p. 413. Mare Island. A variety with solitary involucra.

Quercus agrifolia, Nees; Hook.

De. Pl. F. 377. Alcatraz. A
small, spreading tree.

Borylia rostrata, Art. Alca-
tras. Stems 4 to 8 feet high, forming thickets.
The leaves are much more downy and rounded
than the plant of the Eastern North Amer-
ica, and the beak shorter. But Hart-
weg's specimens (no. 1960) are intermediate.

W. *Scirpus riparius*, Presl; Nees; Hook.
1851. 192. *Malachochla riparia*, Nees,
Cyperospernum Californicum, G. A. Meyer,
Cyper. t. 2. Mare Island; in marshes.

Scirpus maritimus, Linn. Mare
Island; in salt marshes.

Triglochin maritimum, Linn. Mare
Island; in salt marshes.

Ruppia maritima, Linn. Mare
Island.

Gymnogramma triangulare,
Kaulf.; Stolk. & Grav. De Fil., t. 315,
Mare Island; on banks by the sea side.

Pteris aquilina, Linne. Pleatras.
Exactly the ^{common} European form.

Allosorus andromedifolius, Kaulf.
Mal. Flvid. p. 18, t. 11. Mare Island.
This is the true plant of Lehmann's
and Kaulfuss, with a creeping rhizome
and blunt pinnales; and not the same
as Hartweg's no. 2042, which has muc-
cous pointed pinnales, a tufted rachis,
&c. - and ~~is at present~~ ^{now} has been character-
ised by Latm. under the name of *A.*
mucronatus.

Aspidium argutum, Kaulf., Enum.
Fil. p. 242; Stolk. & Grav. Bot. Besch. p. 162.
In thickets, Pleatras. — This has been
referred to *A. rigidum*; but it differs
notably in size and aspect from the
European plant.

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